## <u>ABSTRACT</u>

The process comprises:

- (1) the preparation of a mixture comprising at least one organic monomer Z with a C=C group, polymerizable by a radical process, at least one organic photochromic compound, at least one surfactant, water and optionally a polymerization primer;
- (2) the treatment of the mixture obtained in step (1) in order to form a miniemulsion consisting of an organic phase dispersed in the form of droplets having a diameter of 50 to 500 nm, and preferably 50 to 300 nm, in an aqueous phase;
- (3) the addition to the miniemulsion of a polymerization primer, if this latter was not introduced in step (1), or of a quantity of primer additional to that added in step (1);
- (4) the polymerization of the reaction mixture obtained in step (3), and
- (5) the recovery of the photochromic latex.